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(54) PRODUCTION OF SILICON CARBIDE SINGLE CRYSTAL AND APPARATUS FOR PRODUCTION THEREFOR

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a method for easily producing high-quality silicon carbide single crystal which is free from crystal defects, etc.

SOLUTION: At the time of sublimating silicon carbide raw materials 4, introducing the same onto a seed crystal 2 and depositing the single crystal 5, a sublimating gas is brought into contact with an activated graphite body or is brought into contact with the graphite body held at a temp. higher than the temp. of the raw materials and thereafter, the sublimating gas is introduced to the seed crystal 2. The apparatus for production consists of the constitution obtd. by loading a graphite capsule 3 housing the raw materials into a graphite crucible 1, forming the cap plate or bottom plate of the capsule of a porous graphite body, arranging the seed crystal 2 above the cap plate 11 or below the bottom plate 12, housing the graphite crucible 1 into a reaction tube 7 reducible in its pressure and providing this reaction tube 7 with a heater 6.

